

REMARKS

Claims 1, 2, 4, 5 and 7-20 stand rejected, and claims 8-14 and 19 are objected to. By the above amendments, claims 1, 8, 11, 12 and 20 have been amended, and claims 4, 5, 7, 15 and 16 have been canceled. Thus, claims 1, 2, 8-14 and 17-20 are presently pending in the subject application. Favorable reconsideration of the application and allowance of all of the pending claims are respectfully requested in view of the above amendments and the following remarks.

In the outstanding Office Action, the Examiner maintains the following rejections: claims 1 and 7 stand rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Lobovsky et al. (U.S. 2002/0113335); claims 1, 2, 4, 5, 7, 17, 18 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bonard et al. ("Purification and Size-Selection of Carbon Nanotubes . . .") in view of Lobovsky et al.; claim 18 is further rejected under 35 U.S.C. § 103(a) as being unpatentable over Bonard et al. in view of Lobovsky, and further in view of Heer et al. ("Aligned Carbon Nanotube Films . . ."); and claims 1, 15 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smalley et al. (US 2003/0133865). In addition, claims 15 and 16 stand rejected under 35 U.S.C. § 112, second paragraph. Applicant respectfully traverses the rejections of these claims as applied to the amended claims and in view of the following remarks.

The rejection of claims 15 and 16 under 35 U.S.C. § 112, second paragraph, and based upon the cited references is now moot in light of the cancellation of these claims.

Independent claim 1 was amended to recite a method of isolating single walled carbon nanotube structures, the method comprising: mixing the structures in a solution including an effective amount of a dispersal agent to substantially disperse the structures within the solution; wherein the dispersal agent comprises at least one of octyl-phenoxypolyethoxyethanol, polyoxyethylene sorbitol esters, deoxycholates, taurocholic acid, cyclodextrins, chaotropic salts, poloxamers, and sapogenin glycosides. Similarly, independent claim 20 was amended to recite a method of purifying single walled carbon nanotube structures embedded within raw material, comprising: mixing the structures in a solution including an effective amount of a dispersal agent to substantially separate the structures from contaminants in the raw material; wherein the dispersal agent comprises at least one of octyl-phenoxypolyethoxyethanol, polyoxyethylene sorbitol esters, deoxycholates, taurocholic acid, cyclodextrins, chaotropic salts, poloxamers, and

sapogenin glycosides. None of the cited references discloses or renders obvious the combined features of each of claims 1 and 20.

Lobovsky et al. discloses the use of sodium dodecyl sulfate (SDS) and other specific cationic and nonionic surfactants (see paragraph [0050] of Lobovsky et al.) to obtain a dispersion of nanotubes. However, there is no disclosure or suggestion in Lobovsky et al. of the use of any of the dispersal agents recited in each of amended claims 1 and 20.

Further, the combination of Bonard et al. with Lobovsky et al. does not make up for the noted deficiencies of Lobovsky et al., and, therefore, should not render obvious the combined features of each of amended claims 1 and 20. As noted in previous responses, Bonard et al. discloses the use of SDS to purify carbon nanotubes. There is no disclosure or suggestion in Bonard et al. of the use of any of the dispersal agents as recited in each of amended claims 1 and 20. Accordingly, the Examiner is requested to withdraw the rejection of these claims as being obvious based upon the combined teachings of Bonard et al. and Lobovsky et al.

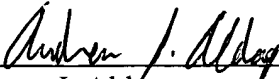
Smalley et al., discloses dispersing single-walled carbon nanotubes using sulfonic acids (see paragraph [0043] of Smalley et al.). However, there is no disclosure or suggestion in Smalley et al. of the use of any of the dispersal agents recited in amended claims 1 and 20. Further, the cancellation of claims 15 and 16 renders moot the rejection of these claims based upon Smalley et al. Accordingly, the Examiner is requested to withdraw the rejection of claim 1 as being obvious based upon Smalley et al.

Claims 2, 17 and 18 each depend, either directly or indirectly, from claim 1. Accordingly, the Examiner is requested to withdraw the rejection of these claims based upon the previous remarks.

In view of the foregoing, Applicant respectfully requests the Examiner to find the application to be in condition for allowance with claims 1, 2, 8-14 and 17-20. However, if for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to call the undersigned attorney to discuss any unresolved issues and to expedite the disposition of the application.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee for such extension is to be charged to Deposit Account No. 05-0460.

Respectfully submitted,



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